

In the Claims:

1(Original). A method of operating a home gateway system comprising the steps of:

- (a) connecting a telephone to a data telephony interface of the home gateway system;
- (b) dialing a destination telephone number;
- (c) triggering on a call request at a switch of the home gateway system and sending a query to a processor of the home gateway system;
- (d) receiving a reply from the processor including a telephone number of an internet service provider;
- (e) establishing a telephony connection with the internet service provider; and
- (f) sending a message to the internet service provider including the destination telephone number.

2(Original). The method of claim 1, further including the steps of:

- (g) receiving an audio signal from the telephone;
- (h) digitizing the audio signal to form a digitized signal;
- (i) packetizing the digitized signal to form a plurality of outgoing packets; and
- (j) transmitting the plurality of outgoing packets to the internet service provider.

3(Original). The method of claim 2, further including the steps of:

- (k) receiving a plurality of incoming packets from the internet service provider;
- (l) converting the plurality of incoming packets into an incoming audio signal; and
- (m) connecting the incoming audio signal to the telephone.

4(Original). The method of claim 1, wherein step (e) further includes the steps of:

- (e1) establishing a wireless local loop connection to a base station;
- (e2) connecting the base station to the internet service provider.

5(Original). The method of claim 2, wherein step (h) includes the step of compressing the digitized signal.

6(Original). The method of claim 2, wherein step (j) further includes the steps of:

- (j1) determining a priority of the plurality of outgoing data packets;
- (j2) when the priority is low, storing the plurality of outgoing data packets until all of a high priority data packets have been transmitted.

7(Cancelled).A method of operating a home gateway system comprising the steps of:

- (a) receiving a request;
- (b) when the request is received at a router and requires an external connection, passing the request to a processor;
- (c) sending a command to a transceiver to establish the external connection;
- (d) establishing a wireless local loop connection to a base station; and
- (e) establishing a telephony connection to a service provider.

8(Cancelled). The method of claim 7, wherein step (c) further includes to the steps of;

(c1) determining if the request includes an asymmetrical data service indicator;

(c2) when the request includes an asymmetrical data service indicator, establishing an asymmetrical data link with the base station.

9(Cancelled). The method of claim 7, further including the steps of:

(f) receiving a plurality of data packets for transmission over the external connection;

(g) determining a priority for the plurality of data packets;

(h) when the plurality of data packets have a low priority and a high priority data packets are received for transmission over the external connection, sending the high priority data packets before sending the plurality of data packets.

10(Cancelled). The method of claim 7, further including the steps of:

(f) receiving a plurality of data packets for transmission over the external connection;

(g) determining a priority for the plurality of data packets;

(h) when the plurality of data packets have a low priority and a high priority data packets are received for transmission over the external connection, compressing the plurality of data packets to form a plurality of compressed data packets;

(i) multiplexing the plurality of compressed data packets with the high priority data packets over the external connection.

11(Cancelled). The method of claim 7, further including the steps of:

(f) when the request is an information service provider request, determining if the request was from a television processing system;

(g) when the request was from the television processing system, sending a received information over a channel to a television.

12(Cancelled). The method of claim 7, further including the steps of:

(f) when the request is received at a switch, determining if the request is from a data telephony interface;

(g) when the request is from the data telephony interface, sending a query to the processor;

(h) receiving a reply from the processor including a telephone number of an internet phone service provider;

(i) establishing a telephony connection with the internet phone service provider;
and

(j) sending a message to the internet phone service provider including a destination telephone number.

13(Original). A home gateway system comprising:

a transceiver;

a switch connected to the transceiver;

a processor connected to the switch;

a router connected to the switch, the router receiving a data packet from an internal port with an external address, the router sending a request to the processor to establish a communication session with an internet service provider, the processor directing the transceiver to establish a telephony connection with the internet service provider.

14(Original). The home gateway system of claim 13, wherein the transceiver establishes a wireless local loop connection to a base station as part of the telephony connection.

15(Original). The home gateway system of claim 13, wherein the processor directs the transceiver to setup an asymmetric data channel.

16(Original). The home gateway system of claim 13, further including a television processing system connected to the router.

17(Original). The home gateway system of claim 16, wherein the television processing system receives a plurality of information from an internet information provider, the television processing system sending the plurality of information over a selected channel of a television.

18(Original). The home gateway system of claim 17, wherein the television processing system receives an email request, the television processing system directing the processor to download an email to the television processing system, the television processing system sending the email over the selected channel of the television.

19(Original). The home gateway system of claim 13, further including an emergency broadcast network receiver connected to the television processing system.

20(Original). The home gateway system of claim 13, further including a voice mail system.

21(Original). A home gateway system comprising:

- a transceiver including a vocoder and a multiplexer;
 - a switch connected to the transceiver having a telephony input and a data telephony input;
 - a processor connected to the switch;
 - a router connected to the switch capable of routing data between a plurality of ports;
 - a television processing system connected to the router, the television processing system capable of receiving an information from the router and sending the information over a predetermined channel to a television for display;
 - an emergency broadcast system receiver connected to the television processing system; and
- wherein the switch receives a destination address over the data telephony input and sends a query to the processor, the processor returns a response including an internet phone provider number, the switch passes the internet phone provider number to the transceiver, the transceiver establishes a telephony connection with an internet phone provider including a wireless local loop connection to a base station.